

# Dekati® eFilter™

- Standard gravimetric filter measurement
- Real-time PM accumulation on a filter
- Fully automated operation



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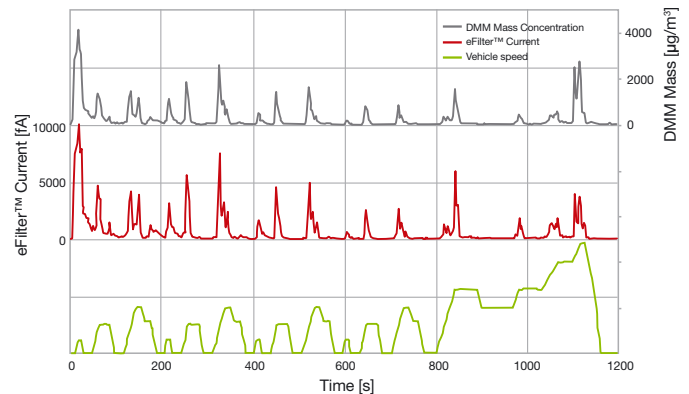
Dekati® eFilter™ is completely new instrument that adds real-time PM detection into a standard gravimetric filter holder. The Dekati® eFilter™ assembly is approximately the same size as a normal PM filter holder and it fits directly into all existing exhaust PM filter sampling systems including CVS tunnels. In addition to the standard gravimetric filter measurement, the Dekati® eFilter™ gives a real-time signal throughout the filter sampling period which allows monitoring PM accumulation on the filter during different stages of the filter sampling. This real-time signal changes the standard filter holder into a sensitive, dynamic measurement instrument for modern routine emission measurements.



Dekati® eFilter™ assembly is in one compact single unit with automated operation. The real-time detection module is battery operated and it includes a diffusion charger with electrical detection for sensitive real-time measurement. The real-time PM detection starts automatically when standard filter sampling is started requiring no actions from the operator. A separate pump is used in the real-time detection module to make sure the gravimetric filter sampling is not affected by the real-time measurement.

## Features

- Standard gravimetric filter measurement that meets US EPA requirements
- Compatible with existing gravimetric PM measurement filter holders and sampling systems
- Automated and sensitive real-time PM measurement
- Battery operated with internal pump for real-time PM measurement
- Fully automated operation; gravimetric filter flow automatically starts the real-time measurement
- Plug-and-play and maintenance free instrument
- Replaceable real-time detection module
- Can be used inside a 47 °C cabinet
- Touch screen user interface
- Separate docking station with automatic flow calibration
- Data saved to a micro-SD memory card

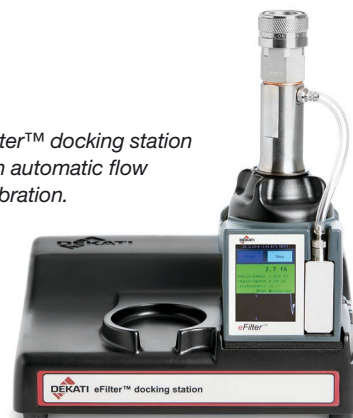


*eFilter™ and DMM measurement during a NEDC cycle.*

## Specifications

Primary sample flow rate	20–100 lpm
Secondary sample flow rate	0.5 lpm, automatically adjusted
Sensitivity	approx. 1 µg/m <sup>3</sup> or 1000 #/cm <sup>3</sup> for 70 nm particles
Save interval	1 s
Operating conditions	10–50 °C
Filter holder	US EPA 40 CFR Part 86 Subpart N
Data transfer	Micro-SD card, USB
Dimensions	H225 x W85 x L90 mm
Weight	1.5 kg
Inlet/outlet	Swagelok® quick connectors, G1/2" thread

*eFilter™ docking station with automatic flow calibration.*



For more information, please contact: [sales@dekati.fi](mailto:sales@dekati.fi)



**Dekati Ltd.**  
Tykkitie 1  
FI-36240 Kangasala, Finland  
Tel. int. +358 3 3578 100  
E-mail [sales@dekati.fi](mailto:sales@dekati.fi)  
[www.dekati.fi](http://www.dekati.fi)

Dekati Ltd. is specialized in the design and manufacture of innovative fine particle measuring and sampling devices. Since its founding in 1994, Dekati has become the technological market leader in producing fine particle measurement instrumentation for various applications and thousands of customers. ●